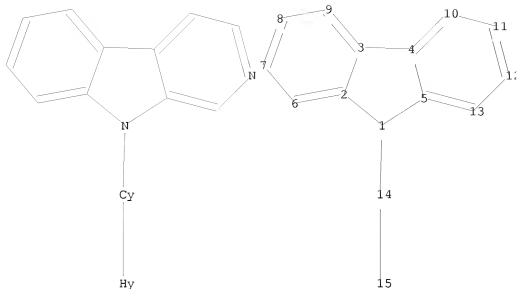


Str

=>



chain nodes :

14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13

chain bonds :

1-14 14-15

ring bonds :

1-2 1-5 2-3 2-6 3-4 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13

exact/norm bonds :

1-2 1-5 1-14 3-4 14-15

normalized bonds :

2-3 2-6 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom

L1 STRUCTURE UPLOADED

=> s l1 sss full

FULL SEARCH INITIATED 10:43:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 257598 TO ITERATE

100.0% PROCESSED 257598 ITERATIONS  
SEARCH TIME: 00.00.08

25 ANSWERS

L2 25 SEA SSS FUL L1

=> s l2

L3 17 L2

=> s 13 and py<=2003  
24009911 PY<=2003  
L4 0 L3 AND PY<=2003

=> s 13 and py<=2004  
25113470 PY<=2004  
L5 2 L3 AND PY<=2004

=> d 15 1-2 ibib hitstr

L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device and display showing high luminous efficiency and long life

Author/Inventor

Suzuri, Yoshiyuki; Kita, Hiroshi; Kato, Eisaku; Oshiyama, Tomohiro; Fukuda, Mitsuhiro; Ueda, Noriko

Patent Assignee/Corporate Source

Konica Minolta Holdings, Inc., Japan

Source

PCT Int. Appl., 156 pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004095889	A1	20041104	WO 2004-JP5603	20040420

Patent Number (1)

WO 2004095889

Kind Code (1)

A1

Patent Publication Date (1)

20041104

Application Number (1)

WO 2004-JP5603

Application Date (1)

20040420

Priority Patent Number (1)

JP 2003-117886

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20030423

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device material and organic electroluminescent device using same

Author/Inventor

Iwakuma, Toshihiro; Tomita, Seiji; Arakane, Takashi

Patent Assignee/Corporate Source

Idemitsu Kosan Co., Ltd., Japan

Source

PCT Int. Appl., 50 pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004053019	A1	20040624	WO 2003-JP15874	20031211

Patent Number (1)

WO 2004053019

Kind Code (1)

A1

Patent Publication Date (1)

20040624

Application Number (1)

WO 2003-JP15874

Application Date (1)

20031211

Priority Patent Number (1)  
JP 2002-360134  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20021212

=> d his

(FILE 'HOME' ENTERED AT 10:42:50 ON 30 OCT 2008)

FILE 'REGISTRY' ENTERED AT 10:43:20 ON 30 OCT 2008

L1 STRUCTURE UPLOADED  
L2 25 S L1 \$\$\$ FULL

FILE 'CAPLUS' ENTERED AT 10:43:53 ON 30 OCT 2008

L3 17 S L2  
L4 0 S L3 AND PY<=2003  
L5 2 S L3 AND PY<=2004

=> s 13 not 15  
L6 15 L3 NOT L5

=> d 16 1-15 ibib hitstr

L6 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
Title

Organic electroluminescence element with little image defects containing metal complex dopant in host compound

Author/Inventor

Iwakuma, Toshihiro; Nishimura, Kazuki; Hosokawa, Chishio

Patent Assignee/Corporate Source

Idemitsu Kosan Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 35pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008147351	A	20080626	JP 2006-331898	20061208

Patent Number (1)

JP 2008147351

Kind Code (1)

A

Patent Publication Date (1)

20080626

Application Number (1)

JP 2006-331898

Application Date (1)

20061208

Priority Patent Number (1)

JP 2006-331898

Priority Patent Publication Date (1)

20061208

L6 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN  
Title

Charge transport materials, compositions for organic electroluminescent device's, and thin films for organic electroluminescent devices

Author/Inventor

Iida, Koichiro; Ishikawa, Hironori; Yabe, Masayoshi; Sugiyama, Toshi

Patent Assignee/Corporate Source

Mitsubishi Chemical Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 54pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007335852	A	20071227	JP 2007-128159	20070514

Patent Number (1)  
JP 2007335852  
Kind Code (1)  
A  
Patent Publication Date (1)  
20071227  
Application Number (1)  
JP 2007-128159  
Application Date (1)  
20070514  
Priority Patent Number (1)  
JP 2006-137939  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20060517

L6 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Organic electroluminescent device, display and illuminating device  
Author/Inventor  
Yasukawa, Noriko; Kato, Eisaku; Otsu, Shinya; Suzuri, Yoshiyuki; Sugita, Shuichi; Kita, Hiroshi; Nakata, Aki  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan  
Source  
PCT Int. Appl., 122pp. CODEN: PIXXD2  
Document Type  
Patent  
Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007108362	A1	20070927	WO 2007-JP54916	20070313

Patent Number (1)  
WO 2007108362  
Kind Code (1)  
A1  
Patent Publication Date (1)  
20070927  
Application Number (1)  
WO 2007-JP54916  
Application Date (1)  
20070313  
Priority Patent Number (1)  
JP 2006-74177  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20060317

L6 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Organic electroluminescent devices containing compounds having biphenylene rings, display units, and lighting installations  
Author/Inventor  
Yasukawa, Noriko; Kato, Eisaku  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 58pp. CODEN: JKXXAF  
Document Type  
Patent  
Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007165378	A	20070628	JP 2005-356094	20051209

Patent Number (1)  
JP 2007165378  
Kind Code (1)  
A  
Patent Publication Date (1)  
20070628  
Application Number (1)  
JP 2005-356094  
Application Date (1)  
20051209  
Priority Patent Number (1)  
JP 2005-356094  
Priority Patent Publication Date (1)  
20051209

L6 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Organic compound, charge-transporting material, composition for charge-transporting material and organic electroluminescent device showing high brightness, high light efficiency and extended service life

Author/Inventor  
Iida, Koichiro; Kawamura, Yuichiro; Ogata, Tomoyuki; Yabe, Masayoshi; Okabe, Misako; Takeuchi, Masako; Okabe, Kazuki  
Patent Assignee/Corporate Source  
Mitsubishi Chemical Corporation, Japan

Source  
PCT Int. Appl., 119pp. CODEN: PIXXD2

Document Type  
Patent

Language  
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007063760	A1	20070607	WO 2006-JP323330	20061122

Patent Number (1)  
WO 2007063760  
Kind Code (1)  
A1  
Patent Publication Date (1)  
20070607  
Application Number (1)  
WO 2006-JP323330  
Application Date (1)  
20061122  
Priority Patent Number (1)  
JP 2005-346164  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20051130

L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
White light-emitting organic electroluminescent devices and illumination apparatus

Author/Inventor  
Kashiwagi, Hiroshi; Nakayama, Tomoyoshi  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan

Source  
Jpn. Kokai Tokkyo Koho, 75pp. CODEN: JKXXAF

Document Type  
Patent

Language  
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007059310	A	20070308	JP 2005-245726	20050826

Patent Number (1)  
JP 2007059310  
Kind Code (1)  
A  
Patent Publication Date (1)

20070308  
Application Number (1)  
JP 2005-245726  
Application Date (1)  
20050826  
Priority Patent Number (1)  
JP 2005-245726  
Priority Patent Publication Date (1)  
20050826

L6 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Organic electroluminescent device, display and illuminating device  
Author/Inventor

Sugita, Shuichi; Tanaka, Tatsuo

Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan

Source  
PCT Int. Appl., 58pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006114966	A1	20061102	WO 2006-JP306079	20060327

Patent Number (1)  
WO 2006114966

Kind Code (1)  
A1

Patent Publication Date (1)  
20061102

Application Number (1)  
WO 2006-JP306079

Application Date (1)  
20060327

Priority Patent Number (1)  
JP 2005-119503

Priority Kind Code (1)  
A

Priority Patent Publication Date (1)  
20050418

L6 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
The organic electroluminescence element, the display, and the lighting system  
Author/Inventor

Sugita, Shuichi

Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan

Source  
Jpn. Kokai Tokkyo Koho, 46 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006156445	A	20060615	JP 2004-340275	20041125

Patent Number (1)  
JP 2006156445

Kind Code (1)  
A

Patent Publication Date (1)  
20060615

Application Number (1)  
JP 2004-340275

Application Date (1)  
20041125

Priority Patent Number (1)

JP 2004-340275  
Priority Patent Publication Date (1)  
20041125

L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title Materials for organic electroluminescent devices, lighting, and display devices  
Author/Inventor

Otsu, Shinya; Yasukawa, Noriko; Kato, Eisaku

Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan

Source Jpn. Kokai Tokkyo Koho, 45 pp. CODEN: JKXXAF

Document Type  
Patent

Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006143845	A	20060608	JP 2004-334414	20041118

Patent Number (1)

JP 2006143845

Kind Code (1)

A

Patent Publication Date (1)

20060608

Application Number (1)

JP 2004-334414

Application Date (1)

20041118

Priority Patent Number (1)

JP 2004-334414

Priority Patent Publication Date (1)

20041118

L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title Fluorene compounds, organic electroluminescent (EL) elements containing them with low driving voltage and excellent emission efficiency and durability, and lighting apparatus and displays using them  
Author/Inventor

Otsu, Shinya; Oshiyama, Tomohiro; Kato, Eisaku

Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan

Source Jpn. Kokai Tokkyo Koho, 48 pp. CODEN: JKXXAF

Document Type  
Patent

Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006131783	A	20060525	JP 2004-323312	20041108

Patent Number (1)

JP 2006131783

Kind Code (1)

A

Patent Publication Date (1)

20060525

Application Number (1)

JP 2004-323312

Application Date (1)

20041108

Priority Patent Number (1)

JP 2004-323312

Priority Patent Publication Date (1)

20041108

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device, display and illuminating device

Author/Inventor  
Sugita, Shuichi; Kita, Hiroshi  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan  
Source  
PCT Int. Appl., 136 pp. CODEN: PIXXD2  
Document Type  
Patent  
Language  
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006043440	A1	20060427	WO 2005-JP18672	20051011

Patent Number (1)  
WO 2006043440  
Kind Code (1)  
A1  
Patent Publication Date (1)  
20060427  
Application Number (1)  
WO 2005-JP18672  
Application Date (1)  
20051011  
Priority Patent Number (1)  
JP 2004-304054  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20041019

L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent devices, illumination and display devices

Author/Inventor  
Sugita, Shuichi; Kato, Eisaku; Otsu, Shinya; Ueda, Noriko  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 54 pp. CODEN: JKXXAF  
Document Type  
Patent  
Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006080271	A	20060323	JP 2004-262144	20040909

Patent Number (1)  
JP 2006080271  
Kind Code (1)  
A  
Patent Publication Date (1)  
20060323  
Application Number (1)  
JP 2004-262144  
Application Date (1)  
20040909  
Priority Patent Number (1)  
JP 2004-262144  
Priority Patent Publication Date (1)  
20040909

L6 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent element, illuminating device, and display

Author/Inventor  
Sugita, Shuichi; Kato, Eisaku; Otsu, Shinya; Ueda, Noriko  
Patent Assignee/Corporate Source  
Konica Minolta Holdings, Inc., Japan  
Source



Jpn. Kokai Tokkyo Koho, 49 pp. CODEN: JKXXAF

Document Type  
Patent  
Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006080272	A	20060323	JP 2004-262145	20040909

Patent Number (1)

JP 2006080272

Kind Code (1)

A

Patent Publication Date (1)

20060323

Application Number (1)

JP 2004-262145

Application Date (1)

20040909

Priority Patent Number (1)

JP 2004-262145

Priority Patent Publication Date (1)

20040909

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device, illuminating device and display

Author/Inventor

Sugita, Shuichi; Suzuri, Yoshiyuki; Kita, Hiroshi

Patent Assignee/Corporate Source

Konica Minolta Holdings, Inc., Japan

Source

PCT Int. Appl., 115 pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006013739	A1	20060209	WO 2005-JP13485	20050722

Patent Number (1)

WO 2006013739

Kind Code (1)

A1

Patent Publication Date (1)

20060209

Application Number (1)

WO 2005-JP13485

Application Date (1)

20050722

Priority Patent Number (1)

JP 2004-227880

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20040804

L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device for display and lighting apparatus

Author/Inventor

Ueda, Noriko; Yamada, Taketoshi; Kato, Eisaku; Kita, Hiroshi

Patent Assignee/Corporate Source

Konica Minolta Holdings, Inc., Japan

Source

Jpn. Kokai Tokkyo Koho, 68 pp. CODEN: JKXXAF

Document Type

Patent

Language

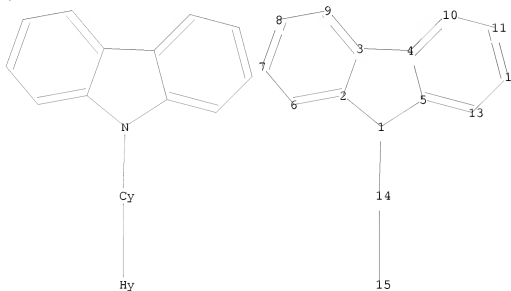
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005293882	A	20051020	JP 2004-103248	20040331

Patent Number (1)  
 JP 2005293882  
 Kind Code (1)  
 A  
 Patent Publication Date (1)  
 20051020  
 Application Number (1)  
 JP 2004-103248  
 Application Date (1)  
 20040331  
 Priority Patent Number (1)  
 JP 2004-103248  
 Priority Patent Publication Date (1)  
 20040331

=>



chain nodes :

14 15

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13

chain bonds :

1-14 14-15

ring bonds :

1-2 1-5 2-3 2-6 3-4 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13

exact/norm bonds :

1-2 1-5 1-14 3-4 14-15

normalized bonds :

2-3 2-6 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom

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L7      STRUCTURE UPLOADED

-> s 17 sss full
FULL SEARCH INITIATED 10:55:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 734195 TO ITERATE

100.0% PROCESSED 734195 ITERATIONS
SEARCH TIME: 00.00.06

1637 ANSWERS

L8      1637 SEA SSS FUL L7

-> s 18
L9      900 L8

-> s 19 and py<-2003
      24009911 PY<-2003
L10     267 L9 AND PY<-2003

-> s 110 and electrolumin?
      86691 ELECTROLUMIN?
L11     87 L10 AND ELECTROLUMIN?

-> s arakane or iwakuma or tomita
      1 ARAKANE
      2 IWAKUMA
      294 TOMITA
      1 TOMITAS
      294 TOMITA
      (TOMITA OR TOMITAS)
L12     297 ARAKANE OR IWAKUMA OR TOMITA

-> s 111 not 112
L13     87 L11 NOT L12

-> e arakane/au
E1      1 ARAKAMA MASAO/AU
E2      1 ARAKAKI YOSHITOMO/AU
E3      0 --> ARAKANE/AU
E4      42 ARAKANE ATSUSHI/AU
E5      2 ARAKANE FUSANORI/AU
E6      13 ARAKANE FUTOSHI/AU
E7      1 ARAKANE FUTOSI/AU
E8      5 ARAKANE G/AU
E9      27 ARAKANE GORO/AU
E10     1 ARAKANE HIDENORI/AU
E11     3 ARAKANE HIDEYUKI/AU
E12     2 ARAKANE HIROYASU/AU

-> e arakane takashi/au
E1      1 ARAKANE SUMINORI/AU
E2      8 ARAKANE T/AU
E3      56 --> ARAKANE TAKASHI/AU
E4      10 ARAKANE TAKAYUKI/AU
E5      2 ARAKANE TAMAMI/AU
E6      1 ARAKANE TOHRU/AU
E7      1 ARAKANE TOMOHIRO/AU
E8      1 ARAKANE TORAO/AU
E9      15 ARAKANE TOSHIAKI/AU
E10     1 ARAKANE TOSHIO/AU
E11     2 ARAKANE TOSHIYUKI/AU
E12     4 ARAKANE Y/AU

-> s e3
L14     56 "ARAKANE TAKASHI"/AU

-> e iwakuma toshihiro/au
E1      3 IWAKUMA TATEO/AU
E2      18 IWAKUMA TOMOO/AU
E3      77 --> IWAKUMA TOSHIHIRO/AU
E4      1 IWAKUMA TOSHIMICHI/AU

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E5      24      IWAKUMA TOSHIO/AU
E6      1      IWAKUMA YASUKO/AU
E7      1      IWAKUMI OSAMU/AU
E8      1      IWAKUMO SEIJI/AU
E9      1      IWAKUN B T/AU
E10     1      IWAKUN O/AU
E11     2      IWAKUNI H/AU
E12     31     IWAKUNI HIDEHARU/AU

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-> s e3
L15     77     "IWAKUMA TOSHIHIRO"/AU

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=> s tomita seiiji/au
L16     0      TOMITA SEIJI/AU

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E2      3      TOMITA SEIICHIRO/AU
E3      37 --> TOMITA SEIJI/AU
E4      26     TOMITA SEIJIRO/AU
E5      1      TOMITA SEIJIROU/AU
E6      3      TOMITA SEIKI/AU
E7      1      TOMITA SEISABURO/AU
E8      74     TOMITA SEISUKE/AU
E9      1      TOMITA SEITAN/AU
E10     1      TOMITA SEIZO/AU
E11     3      TOMITA SETSUKO/AU
E12     10     TOMITA SETSUO/AU

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-> s e3
L17     37     "TOMITA SEIJI"/AU

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-> d his

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(FILE 'HOME' ENTERED AT 10:42:50 ON 30 OCT 2008)

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FILE 'REGISTRY' ENTERED AT 10:43:20 ON 30 OCT 2008

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L1      STRUCTURE UPLOADED
L2      25 S L1 SSS FULL

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FILE 'CAPLUS' ENTERED AT 10:43:53 ON 30 OCT 2008

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```

L3      17 S L2
L4      0 S L3 AND PY<-2003
L5      2 S L3 AND PY<-2004
L6      15 S L3 NOT L5

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FILE 'REGISTRY' ENTERED AT 10:55:37 ON 30 OCT 2008

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L7      STRUCTURE UPLOADED
L8      1637 S L7 SSS FULL

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FILE 'CAPLUS' ENTERED AT 10:56:04 ON 30 OCT 2008

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L9      900 S L8
L10     267 S L9 AND PY<-2003
L11     87 S L10 AND ELECTROLUMIN?
L12     297 S ARAKANE OR IWAKUMA OR TOMITA
L13     87 S L11 NOT L12
        E ARAKANE/AU
        E ARAKANE TAKASHI/AU
L14     56 S E3
        E IWAKUMA TOSHIHIRO/AU
L15     77 S E3
L16     0 S TOMITA SEIJI/AU
        E TOMITA SEIJI/AU
L17     37 S E3

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=> s l14 or l15 or l17
L18     139 L14 OR L15 OR L17

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=> s l13 not l18
L19     84 L13 NOT L18

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-> s l19 and py<-2002
        22959119 PY<-2002
L20     42 L19 AND PY<-2002

```

=> d 120 1-42 ibib hitstr

L20 ANSWER 1 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Process for preparation of anthracene derivatives

Author/Inventor

Choi, Seok Gyu; Kim, Hyeong Gwon; Lee, Seung Jae; Park, No Hun; Song, Won Jun; Yoo, Si Cheol; Yoo, Si Man

Patent Assignee/Corporate Source

BES Co., Ltd., S. Korea

Source

Repub. Korean Kongkae Taehe Kongbo, No pp. given CODEN: KRXXA7

Document Type

Patent

Language

Korean

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
KR 2002011686	A	20020209	KR 2000-45109	20000803

Patent Number (1)

KR 2002011686

Kind Code (1)

A

Patent Publication Date (1)

20020209

Application Number (1)

KR 2000-45109

Application Date (1)

20000803

Priority Patent Number (1)

KR 2000-45109

Priority Patent Publication Date (1)

20000803

L20 ANSWER 2 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Double-spiro organic compounds and electroluminescent devices

Author/Inventor

Kim, Kong-Kyeum; Son, Se-Hwan; Yoon, Seok-Hee; Bae, Jae-Soon; Lee, Youn-Gu; Im, Sung-Gap; Kim, Ji-Eun; Lee, Jae-Chol

Patent Assignee/Corporate Source

LG Chem, Ltd., S. Korea

Source

PCT Int. Appl., 117 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002088274	A1	20021107	WO 2002-KR458	20020318

Patent Number (1)

WO 2002088274

Kind Code (1)

A1

Patent Publication Date (1)

20021107

Application Number (1)

WO 2002-KR458

Application Date (1)

20020318

Priority Patent Number (1)

KR 2001-23038

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20010427

L20 ANSWER 3 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Novel polymer and its use in luminescent device

Author/Inventor  
Taguchi, Toshiaki  
Patent Assignee/Corporate Source  
Fuji Photo Film Co., Ltd., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 17 pp. CODEN: JKXXAF  
Document Type  
Patent  
Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002302516	A	20021018	JP 2001-104580	20010403

Patent Number (1)  
JP 2002302516  
Kind Code (1)  
A  
Patent Publication Date (1)  
20021018  
Application Number (1)  
JP 2001-104580  
Application Date (1)  
20010403  
Priority Patent Number (1)  
JP 2001-104580  
Priority Patent Publication Date (1)  
20010403

L20 ANSWER 4 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Transition metal complex and light-emitting device  
Author/Inventor  
Igarashi, Tatsuya  
Patent Assignee/Corporate Source  
Fuji Photo Film Co., Ltd., Japan  
Source  
U.S. Pat. Appl. Publ., 46 pp. CODEN: USXXCO  
Document Type  
Patent  
Language  
English

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002134984	A1	20020926	US 2002-59109	20020131

Patent Number (1)  
US 2002134984  
Kind Code (1)  
A1  
Patent Publication Date (1)  
20020926  
Application Number (1)  
US 2002-59109  
Application Date (1)  
20020131  
Priority Patent Number (1)  
JP 2001-26046  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20010201

L20 ANSWER 5 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Fluorene derivatives and long-life organic electroluminescent devices therewith  
Author/Inventor  
Totani, Yoshiyuki; Shimamura, Takehiko; Tanabe, Yoshimitsu; Ishida, Tsutomu; Nakatsuka, Masakatsu  
Patent Assignee/Corporate Source  
Mitsui Chemicals Inc., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 22 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002249484	A	20020906	JP 2001-47638	20010223

Patent Number (1)

JP 2002249484

Kind Code (1)

A

Patent Publication Date (1)

20020906

Application Number (1)

JP 2001-47638

Application Date (1)

20010223

Priority Patent Number (1)

JP 2001-47638

Priority Patent Publication Date (1)

20010223

L20 ANSWER 6 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Synthesis and luminescence properties of triad compounds with a disulfide bridge

Author/Inventor

Wang, Yan; Chang, Chen-Pin; Tian, He

Patent Assignee/Corporate Source

Institute of Fine Chemicals, East China University of Science & Technology, Shanghai, 200237, Peop. Rep. China

Source

Dyes and Pigments (2002 ), 54(3), 265-274 CODEN: DYPIDX; ISSN: 0143-7208

Document Type

Journal

Language

English

L20 ANSWER 7 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Phenothiaziny- or phenoxaziny-substituted fluorene and organic electroluminescent device using the amine compound

Author/Inventor

Tanabe, Yoshimitsu; Shimamura, Takehiko; Totani, Yoshiyuki; Ishida, Tsutomu; Nakatsuka, Masakatsu

Patent Assignee/Corporate Source

Mitsui Chemicals Inc., Japan

Source

Jpn. Kokai Tokkyo Koho, 23 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002212172	A	20020731	JP 2001-11970	20010119

Patent Number (1)

JP 2002212172

Kind Code (1)

A

Patent Publication Date (1)

20020731

Application Number (1)

JP 2001-11970

Application Date (1)

20010119

Priority Patent Number (1)

JP 2001-11970

Priority Patent Publication Date (1)

20010119

L20 ANSWER 8 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Fluorescent nitrogen-containing heterocyclic compound, blue light-emitting material, and electroluminescent device

Author/Inventor

Ise, Toshihiro

Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 27 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002193952	A	20020710	JP 2000-392899	20001225

Patent Number (1)

JP 2002193952

Kind Code (1)

A

Patent Publication Date (1)

20020710

Application Number (1)

JP 2000-392899

Application Date (1)

20001225

Priority Patent Number (1)

JP 2000-392899

Priority Patent Publication Date (1)

20001225

L20 ANSWER 9 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Synthesis and properties of glass-forming hydrazones II [1]. Hydrazones containing bicarbazolyl units

Author/Inventor

Ostrauskaite, Jolita; Voska, Viktoras; Grazulevicius, Juozas V.

Patent Assignee/Corporate Source

Department of Organic Technology, Kaunas University of Technology, Kaunas, LT-3028, Lithuania

Source

Monatsshefte fuer Chemie (2002 ), 133(5), 599-607 CODEN: MOCMB7; ISSN: 0026-9247

Document Type

Journal

Language

English

L20 ANSWER 10 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Light-emitting device and material therefor

Author/Inventor

Okada, Hisashi; Ise, Toshihiro; Mishima, Masayuki; Taguchi, Toshiaki

Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

Source

U.S. Pat. Appl. Publ., 91 pp. CODEN: USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020055014	A1	20020509	US 2001-935711	20010824

Patent Number (1)

US 20020055014

Kind Code (1)

A1

Patent Publication Date (1)

20020509

Application Number (1)

US 2001-935711

Application Date (1)

20010824

Priority Patent Number (1)



JP 2000-254171  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
20000824

L20 ANSWER 11 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN  
Title

Light-emitting device and iridium complex

Author/Inventor

Igarashi, Tatsuya; Kimura, Keizo

Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

Source

U.S. Pat. Appl. Publ., 24 pp. CODEN: USXXCO

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020048689	A1	20020425	US 2001-956007	20010920

Patent Number (1)

US 20020048689

Kind Code (1)

A1

Patent Publication Date (1)

20020425

Application Number (1)

US 2001-956007

Application Date (1)

20010920

Priority Patent Number (1)

JP 2000-287178

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20000921

L20 ANSWER 12 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN  
Title

Organic electroluminescent devices containing diphenylthiophene derivatives

Author/Inventor

Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Totani, Yoshiyuki

Patent Assignee/Corporate Source

Mitsui Chemicals Inc., Japan

Source

Jpn. Kokai Tokkyo Koho, 45 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002075648	A	20020315	JP 2000-259040	20000829

Patent Number (1)

JP 2002075648

Kind Code (1)

A

Patent Publication Date (1)

20020315

Application Number (1)

JP 2000-259040

Application Date (1)

20000829

Priority Patent Number (1)

JP 2000-259040

Priority Patent Publication Date (1)

20000829

## L20 ANSWER 13 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

## Title

Luminescent device

## Author/Inventor

Nishi, Takeshi; Seo, Satoshi; Minakami, Mayumi

## Patent Assignee/Corporate Source

Semiconductor Energy Laboratory Co., Ltd., Japan

## Source

Jpn. Kokai Tokkyo Koho, 17 pp. CODEN: JKXXAF

## Document Type

Patent

## Language

Japanese

## Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002075645	A	20020315	JP 2000-258356	20000829

## Patent Number (1)

JP 2002075645

## Kind Code (1)

A

## Patent Publication Date (1)

20020315

## Application Number (1)

JP 2000-258356

## Application Date (1)

20000829

## Priority Patent Number (1)

JP 2000-258356

## Priority Kind Code (1)

A

## Priority Patent Publication Date (1)

20000829

## L20 ANSWER 14 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

## Title

Light-emitting element and iridium complex

## Author/Inventor

Igarashi, Tatsuya; Ise, Toshihiro; Miyashita, Yousuke; Fujimura, Hidetoshi; Okada, Hisashi; Mishima, Masayuki; Qiu, Xuepeng

## Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

## Source

U.S. Pat. Appl. Publ., 18 pp. CODEN: USXXCO

## Document Type

Patent

## Language

English

## Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20020024293	A1	20020228	US 2001-905996	20010717

## Patent Number (1)

US 20020024293

## Kind Code (1)

A1

## Patent Publication Date (1)

20020228

## Application Number (1)

US 2001-905996

## Application Date (1)

20010717

## Priority Patent Number (1)

JP 2000-216338

## Priority Kind Code (1)

A

## Priority Patent Publication Date (1)

20000717

## L20 ANSWER 15 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

## Title

Light emitting element and azole compound

Author/Inventor

Ise, Toshihiro; Igarashi, Tatsuya; Miyashita, Yousuke; Fujimura, Hidetoshi; Mishima, Masayuki; Okada, Hisashi; Qiu, Xuepeng

Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

Source

Eur. Pat. Appl., 96 pp. CODEN: EPXXDW

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1175128	A2	20020123	EP 2001-117288	20010717

Patent Number (1)

EP 1175128

Kind Code (1)

A2

Patent Publication Date (1)

20020123

Application Number (1)

EP 2001-117288

Application Date (1)

20010717

Priority Patent Number (1)

JP 2000-216339

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20000717

L20 ANSWER 16 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Electroluminescent iridium compounds with fluorinated phenylpyridines, phenylpyrimidines, and phenylquinolines and devices made with such compounds

Author/Inventor

Petrov, Viacheslav A.; Wang, Ying; Grushin, Vladimir

Patent Assignee/Corporate Source

E. I. Du Pont de Nemours & Co., USA

Source

PCT Int. Appl., 41 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002714	A2	20020110	WO 2001-US20539	20010627

Patent Number (1)

WO 2002002714

Kind Code (1)

A2

Patent Publication Date (1)

20020110

Application Number (1)

WO 2001-US20539

Application Date (1)

20010627

Priority Patent Number (1)

US 2000-215362P

Priority Kind Code (1)

P

Priority Patent Publication Date (1)

20000630

L20 ANSWER 17 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Perylene derivatives of light-emitting material and organic electroluminescent device using it

Author/Inventor

Toba, Yasumasa; Onikubo, Shunichi

Patent Assignee/Corporate Source

Toyo Ink Mfg. Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 33 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002003833	A	20020109	JP 2000-190063	20000623

Patent Number (1)

JP 2002003833

Kind Code (1)

A

Patent Publication Date (1)

20020109

Application Number (1)

JP 2000-190063

Application Date (1)

20000623

Priority Patent Number (1)

JP 2000-190063

Priority Patent Publication Date (1)

20000623

L20 ANSWER 18 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescence device

Author/Inventor

Hosokawa, Chishio

Patent Assignee/Corporate Source

Idemitsu Kosan Co., Ltd., Japan

Source

PCT Int. Appl., 55 pp. CODEN: PIXXD2

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001072927	A1	20011004	WO 2001-JP2454	20010327

Patent Number (1)

WO 2001072927

Kind Code (1)

A1

Patent Publication Date (1)

20011004

Application Number (1)

WO 2001-JP2454

Application Date (1)

20010327

Priority Patent Number (1)

JP 2000-87622

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20000327

L20 ANSWER 19 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Biscarbazolyl/biscarbazyl hole-transporting compound, its manufacture, and electroluminescent device using it with high thermal stability

Author/Inventor

Lee, Ji Hoon; Ki, In So; Cho, Song Woo; Che, Byong Hoon

Patent Assignee/Corporate Source

Samsung Sdi Co., Ltd., S. Korea

Source

Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001220380	A	20010814	JP 2000-121836	20000421

Patent Number (1)

JP 2001220380

Kind Code (1)

A

Patent Publication Date (1)

20010814

Application Number (1)

JP 2000-121836

Application Date (1)

20000421

Priority Patent Number (1)

KR 2000-5814

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20000208

L20 ANSWER 20 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Novel condensed hetero ring compound and electroluminescent material

Author/Inventor

Ise, Toshihiro; Okada, Hisashi

Patent Assignee/Corporate Source

Fuji Photo Film Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 36 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001192653	A	20010717	JP 2000-89632	20000328

Patent Number (1)

JP 2001192653

Kind Code (1)

A

Patent Publication Date (1)

20010717

Application Number (1)

JP 2000-89632

Application Date (1)

20000328

Priority Patent Number (1)

JP 1999-305733

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19991027

L20 ANSWER 21 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent component

Author/Inventor

Ueda, Noriko; Okubo, Yasushi; Kita, Hiroshi

Patent Assignee/Corporate Source

Konica Co., Japan

Source

Jpn. Kokai Tokkyo Koho, 30 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001093670	A	20010406	JP 1999-274848	19990928

Patent Number (1)  
JP 2001093670  
Kind Code (1)  
A  
Patent Publication Date (1)  
20010406  
Application Number (1)  
JP 1999-274848  
Application Date (1)  
19990928  
Priority Patent Number (1)  
JP 1999-274848  
Priority Patent Publication Date (1)  
19990928

L20 ANSWER 22 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Novel fluorene ring-containing amines suitable as hole transporters  
Author/Inventor  
Shimamura, Takehiko; Nakatsuka, Masakatsu  
Patent Assignee/Corporate Source  
Mitsui Chemical Industry Co., Ltd., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF  
Document Type  
Patent  
Language  
Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000302756	A	20001031	JP 1999-119932	19990427

Patent Number (1)  
JP 2000302756  
Kind Code (1)  
A  
Patent Publication Date (1)  
20001031  
Application Number (1)  
JP 1999-119932  
Application Date (1)  
19990427  
Priority Patent Number (1)  
JP 1999-119932  
Priority Patent Publication Date (1)  
19990427

L20 ANSWER 23 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
Novel nonpolymeric polyamines, their preparations, and their use as hole transportation materials  
Author/Inventor  
Fujino, Yasumitsu; Ueda, Hideaki; Furukawa, Keiichi  
Patent Assignee/Corporate Source  
Minolta Camera Co., Ltd., Japan  
Source  
Jpn. Kokai Tokkyo Koho, 28 pp. CODEN: JKXXAF  
Document Type  
Patent  
Language  
Japanese

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000186066	A	20000704	JP 1998-364801	19981222

Patent Number (1)  
JP 2000186066  
Kind Code (1)  
A

Patent Publication Date (1)  
20000704  
Application Number (1)  
JP 1998-364801  
Application Date (1)  
19981222  
Priority Patent Number (1)  
JP 1998-364801  
Priority Patent Publication Date (1)  
19981222

L20 ANSWER 24 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Amino compound, manufacture of the compound, and its use in electrophotographic photoconductor and electroluminescent device  
Author/Inventor Fujino, Yasumitsu; Ueda, Hideaki; Furukawa, Keiichi  
Patent Assignee/Corporate Source Minolta Camera Co., Ltd., Japan  
Source Jpn. Kokai Tokkyo Koho, 32 pp. CODEN: JKXXAF  
Document Type Patent  
Language Japanese  
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000169448	A	20000620	JP 1998-346820	19981207

Patent Number (1)  
JP 2000169448  
Kind Code (1)  
A  
Patent Publication Date (1)  
20000620  
Application Number (1)  
JP 1998-346820  
Application Date (1)  
19981207  
Priority Patent Number (1)  
JP 1998-346820  
Priority Patent Publication Date (1)  
19981207

L20 ANSWER 25 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Organic electroluminescent material and device  
Author/Inventor Tamano, Michiko; Onikubo, Shunichi; Okutsu, Satoshi  
Patent Assignee/Corporate Source Toyo Ink Mfg. Co., Ltd., Japan  
Source Jpn. Kokai Tokkyo Koho, 17 pp. CODEN: JKXXAF  
Document Type Patent  
Language Japanese  
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000068059	A	20000303	JP 1998-236702	19980824

Patent Number (1)  
JP 2000068059  
Kind Code (1)  
A  
Patent Publication Date (1)  
20000303  
Application Number (1)  
JP 1998-236702  
Application Date (1)  
19980824  
Priority Patent Number (1)  
JP 1998-236702

Priority Patent Publication Date (1)  
19980624

L20 ANSWER 26 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Compound for organic electroluminescence device and organic electroluminescence device  
Author/Inventor Tamano, Michiko; Maki, Shinichiro  
Patent Assignee/Corporate Source Toyo Ink Mfg. Co., Ltd., Japan  
Source Eur. Pat. Appl., 40 pp. CODEN: EPXXDW  
Document Type Patent  
Language English  
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 965629	A1	19991222	EP 1999-304641	19990615

Patent Number (1)  
EP 965629  
Kind Code (1)  
A1  
Patent Publication Date (1)  
19991222  
Application Number (1)  
EP 1999-304641  
Application Date (1)  
19990615  
Priority Patent Number (1)  
JP 1998-166459  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
19980615

L20 ANSWER 27 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title A novel diamine compound containing carbazole groups for organic electroluminescent devices  
Author/Inventor Uekawa, M.; Miyamoto, Y.; Ikeda, H.; Kaifu, K.; Ichi, T.; Nakaya, T.  
Patent Assignee/Corporate Source Research & Development Group, Oki Electric Industry Co., Ltd., Hachioji, Tokyo, Japan  
Source Thin Solid Films (1999), 352(1,2), 185-188 CODEN: THSFAP; ISSN: 0040-6090  
Document Type Journal  
Language English

L20 ANSWER 28 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Diamine phosphor containing carbazole and anthracene structures and electroluminescent device using it  
Author/Inventor Kamikawa, Masahiro; Miyamoto, Hiroo; Ikeda, Hitoshi; Nakaya, Tadao  
Patent Assignee/Corporate Source Oki Electric Industry Co., Ltd., Japan  
Source Jpn. Kokai Tokkyo Koho, 11 pp. CODEN: JKXXAF  
Document Type Patent  
Language Japanese  
Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11241062	A	19990907	JP 1998-45982	19980226

Patent Number (1)  
JP 11241062  
Kind Code (1)



A  
 Patent Publication Date (1)  
 19990907  
 Application Number (1)  
 JP 1998-45982  
 Application Date (1)  
 19980226  
 Priority Patent Number (1)  
 JP 1998-45982  
 Priority Patent Publication Date (1)  
 19980226

L20 ANSWER 29 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device

Author/Inventor

Nakatsuka, Masakatsu; Kitamoto, Noriko

Patent Assignee/Corporate Source

Mitsui Chemicals Inc., Japan

Source

Jpn. Kokai Tokkyo Koho, 44 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11233260	A	19990827	JP 1998-37652	19980219

Patent Number (1)

JP 11233260

Kind Code (1)

A

Patent Publication Date (1)

19990827

Application Number (1)

JP 1998-37652

Application Date (1)

19980219

Priority Patent Number (1)

JP 1998-37652

Priority Patent Publication Date (1)

19980219

L20 ANSWER 30 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device elements

Author/Inventor

Nakatsuka, Masakatsu; Kitamoto, Noriko

Patent Assignee/Corporate Source

Mitsui Chemicals Inc., Japan

Source

Jpn. Kokai Tokkyo Koho, 45 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11185966	A	19990709	JP 1997-355742	19971224

Patent Number (1)

JP 11185966

Kind Code (1)

A

Patent Publication Date (1)

19990709

Application Number (1)

JP 1997-355742

Application Date (1)

19971224

Priority Patent Number (1)

JP 1997-355742  
Priority Patent Publication Date (1)  
19971224

L20 ANSWER 31 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Organic electric-field light-emitting device containing thiophene derivative

Author/Inventor Nakatsuka, Masakatsu; Kitamoto, Noriko

Patent Assignee/Corporate Source  
Mitsui Chemicals Inc., Japan

Source Jpn. Kokai Tokkyo Koho, 26 pp. CODEN: JKXXAF

Document Type  
Patent

Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11167990	A	19990622	JP 1997-332149	19971202

Patent Number (1)  
JP 11167990

Kind Code (1)  
A

Patent Publication Date (1)  
19990622

Application Number (1)  
JP 1997-332149

Application Date (1)  
19971202

Priority Patent Number (1)  
JP 1997-332149

Priority Patent Publication Date (1)  
19971202

L20 ANSWER 32 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Organic electroluminescent device using fluoranthene derivative

Author/Inventor Nakatsuka, Masakatsu; Kitamoto, Noriko

Patent Assignee/Corporate Source  
Mitsui Chemicals Inc., Japan

Source Jpn. Kokai Tokkyo Koho, 27 pp. CODEN: JKXXAF

Document Type  
Patent

Language  
Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11149987	A	19990602	JP 1997-317031	19971118

Patent Number (1)  
JP 11149987

Kind Code (1)  
A

Patent Publication Date (1)  
19990602

Application Number (1)  
JP 1997-317031

Application Date (1)  
19971118

Priority Patent Number (1)  
JP 1997-317031

Priority Patent Publication Date (1)  
19971118

L20 ANSWER 33 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title Organic electroluminescent display device

## Author/Inventor

Nakatsuka, Masakatsu; Kitamoto, Noriko

## Patent Assignee/Corporate Source

Mitsui Chemicals Inc., Japan

## Source

Jpn. Kokai Tokkyo Koho, 20 pp. CODEN: JKXXAF

## Document Type

Patent

## Language

Japanese

## Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11144873	A	19990528	JP 1997-309060	19971111

## Patent Number (1)

JP 11144873

## Kind Code (1)

A

## Patent Publication Date (1)

19990528

## Application Number (1)

JP 1997-309060

## Application Date (1)

19971111

## Priority Patent Number (1)

JP 1997-309060

## Priority Patent Publication Date (1)

19971111

## L20 ANSWER 34 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

## Title

Light-emitting device containing heterocyclic carbazole backbone-containing compound

## Author/Inventor

Ohama, Akira; Himeshima, Yoshio; Fujinomi, Shigeo

## Patent Assignee/Corporate Source

Toray Industries, Inc., Japan

## Source

Jpn. Kokai Tokkyo Koho, 14 pp. CODEN: JKXXAF

## Document Type

Patent

## Language

Japanese

## Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11144867	A	19990528	JP 1997-302879	19971105

## Patent Number (1)

JP 11144867

## Kind Code (1)

A

## Patent Publication Date (1)

19990528

## Application Number (1)

JP 1997-302879

## Application Date (1)

19971105

## Priority Patent Number (1)

JP 1997-302879

## Priority Patent Publication Date (1)

19971105

## L20 ANSWER 35 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

## Title

Organic electroluminescent material containing anthracene derivative and organic electroluminescent device with it

## Author/Inventor

Okutsu, Satoshi; Tamano, Michiko; Onikubo, Shunichi; Maki, Shinichiro; Enokida, Toshio

## Patent Assignee/Corporate Source

Toyo Ink Mfg. Co., Ltd., Japan

## Source

Jpn. Kokai Tokkyo Koho, 28 pp. CODEN: JKXXAF

## Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11111460	A	19990423	JP 1997-271824	19971006

Patent Number (1)

JP 11111460

Kind Code (1)

A

Patent Publication Date (1)

19990423

Application Number (1)

JP 1997-271824

Application Date (1)

19971006

Priority Patent Number (1)

JP 1997-271824

Priority Patent Publication Date (1)

19971006

L20 ANSWER 36 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

OLEDs containing thermally stable asymmetric charge carrier materials

Author/Inventor

Thompson, Mark E.; Koene, Bryan E.; Loy, Douglas E.

Patent Assignee/Corporate Source

The University of Southern California, USA

Source

PCT Int. Appl., 56 pp. CODEN: PIXXD2

Document Type

Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913691	A1	19990318	WO 1998-US18363	19980904

Patent Number (1)

WO 9913691

Kind Code (1)

A1

Patent Publication Date (1)

19990318

Application Number (1)

WO 1998-US18363

Application Date (1)

19980904

Priority Patent Number (1)

US 1997-925029

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

19970908

L20 ANSWER 37 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device

Author/Inventor

Ishikawa, Hitoshi; Higashiguchi, Itaru; Oda, Atsushi

Patent Assignee/Corporate Source

NEC Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 30 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11074079	A	19990316	JP 1998-148778	19980529

Patent Number (1)  
 JP 11074079  
 Kind Code (1)  
 A  
 Patent Publication Date (1)  
 19990316  
 Application Number (1)  
 JP 1998-148778  
 Application Date (1)  
 19980529  
 Priority Patent Number (1)  
 JP 1997-163586  
 Priority Kind Code (1)  
 A  
 Priority Patent Publication Date (1)  
 19970620

L20 ANSWER 38 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent materials and device with high luminance

Author/Inventor

Okutsu, Satoshi; Tamano, Michiko; Onikubo, Shunichi; Ogawa, Tadashi; Enokida, Toshio

Patent Assignee/Corporate Source

Toyo Ink Mfg. Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 25 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10340786	A	19981222	JP 1997-150565	19970609

Patent Number (1)  
 JP 10340786

Kind Code (1)

A

Patent Publication Date (1)

19981222

Application Number (1)

JP 1997-150565

Application Date (1)

19970609

Priority Patent Number (1)

JP 1997-150565

Priority Patent Publication Date (1)

19970609

L20 ANSWER 39 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Spiro compounds and their uses

Author/Inventor

Salbeck, Josef; Lupo, Donald

Patent Assignee/Corporate Source

Hoechst Research and Technology Deutschland GmbH and Co. K.-G., Germany

Source

PCT Int. Appl., 68 pp. CODEN: PIXXD2

Document Type

Patent

Language

German

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9842655	A1	19981001	WO 1998-EP1559	19980318

Patent Number (1)  
 WO 9842655

Kind Code (1)

A1

Patent Publication Date (1)

19981001  
 Application Number (1)  
 WO 1998-EP1559  
 Application Date (1)  
 19980318  
 Priority Patent Number (1)  
 DE 1997-19711714  
 Priority Kind Code (1)  
 A  
 Priority Patent Publication Date (1)  
 19970320

L20 ANSWER 40 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
 Triamine compound and high-luminance organic field-effect electroluminescent device containing it  
 Author/Inventor  
 Kawamura, Hisayuki; Hosokawa, Chishio  
 Patent Assignee/Corporate Source  
 Idemitsu Kosan Co., Ltd., Japan  
 Source  
 Jpn. Kokai Tokkyo Koho, 16 pp. CODEN: JKXXAF  
 Document Type  
 Patent  
 Language  
 Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10226785	A	19980825	JP 1997-29938	19970214

Patent Number (1)  
 JP 10226785  
 Kind Code (1)  
 A  
 Patent Publication Date (1)  
 19980825  
 Application Number (1)  
 JP 1997-29938  
 Application Date (1)  
 19970214  
 Priority Patent Number (1)  
 JP 1997-29938  
 Priority Patent Publication Date (1)  
 19970214

L20 ANSWER 41 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN

Title  
 Material for organoelectroluminescence device and use thereof  
 Author/Inventor  
 Enokida, Toshio; Onikubo, Toshikazu; Okutsu, Satoshi; Tamano, Michiko  
 Patent Assignee/Corporate Source  
 Toyo Ink Manufacturing Co., Ltd., Japan  
 Source  
 Eur. Pat. Appl., 56 pp. CODEN: EPXXDW  
 Document Type  
 Patent  
 Language  
 English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 847228	A2	19980610	EP 1997-309922	19971209

Patent Number (1)  
 EP 847228  
 Kind Code (1)  
 A2  
 Patent Publication Date (1)  
 19980610  
 Application Number (1)  
 EP 1997-309922  
 Application Date (1)  
 19971209  
 Priority Patent Number (1)

JP 1996-328069  
Priority Kind Code (1)  
A  
Priority Patent Publication Date (1)  
19961209

L20 ANSWER 42 OF 42 CAPLUS COPYRIGHT 2008 ACS on STN  
Title

Organic electroluminescent device materials and organic electroluminescent devices with them  
Author/Inventor  
Enokida, Toshio; Ogawa, Tadashi  
Patent Assignee/Corporate Source  
Toyo Ink Mfg Co, Japan  
Source  
Jpn. Kokai Tokkyo Koho, 13 pp. CODEN: JKXXAF  
Document Type  
Patent  
Language  
Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07053950	A	19950228	JP 1993-198454	19930810

Patent Number (1)  
JP 07053950  
Kind Code (1)  
A  
Patent Publication Date (1)  
19950228  
Application Number (1)  
JP 1993-198454  
Application Date (1)  
19930810  
Priority Patent Number (1)  
JP 1993-198454  
Priority Kind Code (1)  
A3  
Priority Patent Publication Date (1)  
19930810

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Connecting via Winsock to STN

Welcome to STN International! Enter x:X

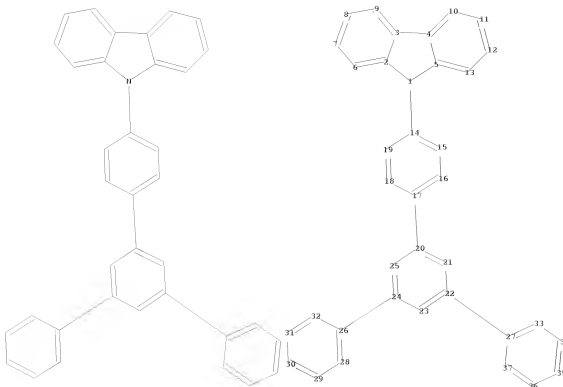
LOGINID:SSPTAMEN1774

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

=>



ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

chain bonds :

1-14 17-20 22-27 24-26

ring bonds :

1-2 1-5 2-3 2-6 3-4 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13 14-15 14-19 15-16 16-17 17-18 18-19  
20-21 20-25 21-22 22-23 23-24 24-25 26-28 26-32 27-33 27-37 28-29 29-30 30-31 31-32 33-34 34-35  
35-36 36-37

exact/norm bonds :

1-2 1-5 1-14 3-4

exact bonds :

17-20 22-27 24-26

normalized bonds :

2-3 2-6 3-9 4-5 4-10 5-13 6-7 7-8 8-9 10-11 11-12 12-13 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-25  
21-22 22-23 23-24 24-25 26-28 26-32 27-33 27-37 28-29 29-30 30-31 31-32 33-34 34-35 35-36 36-37

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom  
15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom  
27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom

L1 STRUCTURE UPLOADED

=> s ll sss sam



SAMPLE SEARCH INITIATED 13:17:05 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 62 TO ITERATE

100.0% PROCESSED 62 ITERATIONS 1 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 768 TO 1712  
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d scan L2

L2 1 ANSWERS REGISTRY COPYRIGHT 2008 ACS on STN

Author/Inventor

9H-Carbazole, 9,9'-(5'-[1,1':3',1'':3'',1''':3''',1''''-quinquephenyl]-5''-yl[1,1':3',1''-terphenyl]-4,4'-diyl)bis- (9CI)

=> s 11 sss full

FULL SEARCH INITIATED 13:17:19 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1179 TO ITERATE

100.0% PROCESSED 1179 ITERATIONS 48 ANSWERS  
SEARCH TIME: 00.00.01

L3 48 SEA SSS FUL L1

=> s 13

L4 49 L3

=> s 14 and py<-2003

24009911 PY<-2003

L5 9 L4 AND PY<-2003

=> d 15 1-9 ibib hitstr

L5 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Iridium complexes as electroluminescent materials and their devices showing high light-emitting efficiency

Author/Inventor

Hamada, Yuji; Matsusue, Akimasa; Nishimura, Kazuki

Patent Assignee/Corporate Source

Sanyo Electric Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 17 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003253256	A	20030910	JP 2002-51802	20020227

Patent Number (1)

JP 2003253256

Kind Code (1)

A

Patent Publication Date (1)

20030910

Application Number (1)

JP 2002-51802

Application Date (1)

20020227

Priority Patent Number (1)

JP 2002-51802

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20020227

L5 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title Anthracene compounds, their organic EL device materials, and their EL devices having high emission efficiency, long service life, and good heat resistance

Author/Inventor Hosokawa, Chishio; Funabashi, Masakazu; Ikeda, Shuji; Yamamoto, Hiroshi

Patent Assignee/Corporate Source Idemitsu Kosan Co., Ltd., Japan

Source Jpn. Kokai Tokkyo Koho, 23 pp. CODEN: JKXXAF

Document Type Patent

Language Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003238534	A	20030827	JP 2002-45705	20020222

Patent Number (1)

JP 2003238534

Kind Code (1)

A

Patent Publication Date (1)

20030827

Application Number (1)

JP 2002-45705

Application Date (1)

20020222

Priority Patent Number (1)

JP 2002-45705

Priority Patent Publication Date (1)

20020222

#### L5 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title Heat-resistant organic electrophosphorescent device showing long service life

Author/Inventor Fujikawa, Hisayoshi; Ikai, Masamichi; Taga, Yasunori; Nakagawa, Satoshi

Patent Assignee/Corporate Source Toyota Central Research and Development Laboratories, Inc., Japan; Toyoda Automatic Loom Works, Ltd.

Source Jpn. Kokai Tokkyo Koho, 12 pp. CODEN: JKXXAF

Document Type Patent

Language Japanese

Patent Information				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003092186	A	20030328	JP 2001-281147	20010917

Patent Number (1)

JP 2003092186

Kind Code (1)

A

Patent Publication Date (1)

20030328

Application Number (1)

JP 2001-281147

Application Date (1)

20010917

Priority Patent Number (1)

JP 2001-281147

Priority Patent Publication Date (1)

20010917

#### L5 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title Organic electroluminescent device and blue luminescence component

Author/Inventor Sato, Hideki; Sato, Yoshiharu; Ichinosawa, Akiko

Patent Assignee/Corporate Source Mitsubishi Chemical Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 23 pp. CODEN: JKXXAF

Document Type  
Patent  
Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003031371	A	20030131	JP 2001-216944	20010717

Patent Number (1)

JP 2003031371

Kind Code (1)

A

Patent Publication Date (1)

20030131

Application Number (1)

JP 2001-216944

Application Date (1)

20010717

Priority Patent Number (1)

JP 2001-216944

Priority Patent Publication Date (1)

20010717

L5 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic light-emitting devices

Author/Inventor

Ikai, Masamichi; Takeuchi, Hisato; Tokito, Shizuo; Taga, Yasunori

Patent Assignee/Corporate Source

Kabushiki Kaisha Toyota Chuo Kenkyusho, Japan

Source

Eur. Pat. Appl., 46 pp. CODEN: EPXXDW

Document Type  
Patent

Language

English

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1202608	A2	20020502	EP 2001-125801	20011029

Patent Number (1)

EP 1202608

Kind Code (1)

A2

Patent Publication Date (1)

20020502

Application Number (1)

EP 2001-125801

Application Date (1)

20011029

Priority Patent Number (1)

JP 2000-330356

Priority Kind Code (1)

A

Priority Patent Publication Date (1)

20001030

L5 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Organic electroluminescent device

Author/Inventor

Sato, Yoshiharu; Sato, Hideki; Ichinosawa, Akiko

Patent Assignee/Corporate Source

Mitsubishi Chemical Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 23 pp. CODEN: JKXXAF

Document Type  
Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001313179	A	20011109	JP 2000-131992	20000501

Patent Number (1)  
JP 2001313179  
Kind Code (1)  
A  
Patent Publication Date (1)  
20011109  
Application Number (1)  
JP 2000-131992  
Application Date (1)  
20000501  
Priority Patent Number (1)  
JP 2000-131992  
Priority Patent Publication Date (1)  
20000501

L5 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Novel nonpolymeric polyamines, their preparations, and their use as hole transportation materials

Author/Inventor

Fujino, Yasumitsu; Ueda, Hideaki; Furukawa, Keiichi

Patent Assignee/Corporate Source

Minolta Camera Co., Ltd., Japan

Source

Jpn. Kokai Tokkyo Koho, 28 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000186066	A	20000704	JP 1998-364801	19981222

Patent Number (1)  
JP 2000186066  
Kind Code (1)  
A  
Patent Publication Date (1)  
20000704  
Application Number (1)  
JP 1998-364801  
Application Date (1)  
19981222  
Priority Patent Number (1)  
JP 1998-364801  
Priority Patent Publication Date (1)  
19981222

L5 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title

Trinaphthylbenzene derivative and organic electroluminescent device using the compound

Author/Inventor

Uchida, Manabu; Koike, Toshihiro; Izumizawa, Isanobu; Furukawa, Kenji

Patent Assignee/Corporate Source

Chieso Corp., Japan

Source

Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF

Document Type

Patent

Language

Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000044519	A	20000215	JP 1998-210733	19980727

Patent Number (1)  
JP 2000044519  
Kind Code (1)  
A

Patent Publication Date (1)  
20000215  
Application Number (1)  
JP 1998-210733  
Application Date (1)  
19980727  
Priority Patent Number (1)  
JP 1998-210733  
Priority Patent Publication Date (1)  
19980727

L5 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN

Title Preparation of 1,3,5-tris[4-(9-carbazolyl)phenyl]benzene derivatives  
Author/Inventor Shiota, Yasuhiko; Inada, Hiroshi  
Patent Assignee/Corporate Source Bando Chemical Ind, Japan  
Source Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF  
Document Type Patent  
Language Japanese

Patent Information

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06312979	A	19941108	JP 1993-104532	19930430

Patent Number (1)  
JP 06312979  
Kind Code (1)  
A  
Patent Publication Date (1)  
19941108  
Application Number (1)  
JP 1993-104532  
Application Date (1)  
19930430  
Priority Patent Number (1)  
JP 1993-104532  
Priority Patent Publication Date (1)  
19930430

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